

LSI LOGIC
FAXLSI Logic Corporation
Intellectual Property
Corporate Legal Department
MS D-1061551 McCarthy Blvd.
Milpitas, CA 95035
RECEIVED
CENTRAL FAX CENTER

MAR 26 2004

Date March 26, 2004Number of pages including cover sheet 5**OFFICIAL**

To: US PTO, Mail Stop IDS

TC 2811

Fax No. (703) 872-9306

Phone No.

CC:

From: Mark Salvatore

Intellectual Property Paralegal

Telephone No. (408) 433-7472

Fax No. (408) 433-7460

REMARKS:

☐ Urgent ☐ For your review ☒ Reply ASAP ☐ Please commentApplication Number: 10/721,971
Filing date: November 24, 2003
First named inventor: Sun, Grace
Attorney docket number: 03-1119

Transmitted herewith for filing via facsimile:

- Transmittal Form PTO/SB/21
- Fee Transmittal PTO/SB/17
- Information Disclosure Statement (letter)
- Information Disclosure Statement by Applicant PTO/SB/O8A

Please contact us at (408) 433-7191 if you do not receive all pages indicated above or experience any difficulty in receiving this facsimile.

This Facsimile is intended only for the use of the addressee and, if the addressee is a client or their agent, contains privileged and confidential information. If you are not the recipient of this facsimile, you have received this facsimile inadvertently and in error. Any review, dissemination, distribution, or copying is strictly prohibited. If you received this facsimile in error, please notify us by telephone and return the facsimile to us

PTO/SB/21 (02-04)

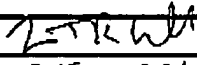
Approved for use through 07/31/2006. OMB 0651-0031


U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/721,971	
	Filing Date	November 24, 2003	
	First Named Inventor	Sun, Grace	
	Art Unit	2811	
	Examiner Name	N/A	
Total Number of Pages in This Submission	4	Attorney Docket Number	03-1119

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Timothy R. Croll, Reg. No. 36,771
Signature	
Date	25 MAR 04

CERTIFICATE OF TRANSMISSION/MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.	
Typed or printed name	Mark Salvatore
Signature	
Date	3-22-04

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0851-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL

for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 0.00

Complete if Known

Application Number	10/721,971
Filing Date	November 24, 2003
First Named Inventor	Sun, Grace
Examiner Name	N/A
Art Unit	2811
Attorney Docket No.	03-1119

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number	12-2252
Deposit Account Name	LSI Logic Corporation

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$) 0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent	-20** =	X	
Claims	-3** =	X	
Multiple Dependent			

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	88	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

**or number previously paid, if greater. For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	2053 130	Non-English specification	
1812 2,520	2812 2,520	For filing a request for ex parte reexamination	
1804 920*	2804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	2805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 850	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	2451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	2460 130	Petitions to the Commissioner	
1807 50	2807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	2806 180	Submission of Information Disclosure Stmt	
8021 40	28021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	2802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Timothy R. Croll	Registration No. (Attorney/Agent)	36,771	Telephone	408-433-7625
Signature	<i>Timothy R. Croll</i>	Date	25 MAR 04		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

RECEIVED
CIVIL FAX CENTER

MAR 26 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of :

Grace Sun et. al.

Serial No. : 10/721,971

Group Art Unit : 2811

Filed : November 24, 2003

Examiner :

For : **Method for Creating Barrier Layers
for Copper Diffusion**

Atty Docket : LSI1P235 / 03-1119

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on the date below:

Mark Salvatore

March 26, 2004

Date _____

Signature

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The references listed in the attached form, copies of which are attached, may be material to examination of above-identified application. Applicants submit these references in compliance with their duty of disclosure pursuant to 37 CFR 1.56 and 1.97.

It is requested that the information disclosed herein be made of record in the application.

This Information Disclosure Statement is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that these references indeed constitute prior art.

If it is determined that any additional fees are due, the Commissioner is hereby authorized to charge such fees to Deposit Account 12-2252.

LSI Logic Corporation
1551 McCarthy Blvd., MS D-106
Milpitas, CA 95035
408-433-7475

Date: 25 MAR 04

Respectfully submitted,

2TRW

Timothy Croll

Reg. No. 36,771



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTO/SB/08A (10-98)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number	10/721,971
Filing Date	November-24, 2003
First Named Inventor	Grace Sun
Group Art Unit	2811
Examiner Name	
Attorney Docket No.	LSI1P235 / 03-1119

Sheet 1 of 1

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code (if known)			
		3,632,438		Richardson et al.	01-04-1972	
		3,710,205		John G. Swanson	01-09-1973	
		4,352,716		Shaible et al.	10-05-1982	
		6,057,223		Lenford et al.	05-02-2000	
		6,077,775		Stumborg et al.	06-20-2000	
		6,083,818		Stumborg et al.	07-04-2000	
		6,117,770		Pramanick et al.	09-12-2000	
		6,211,066		Stumborg et al.	04-03-2001	
		6,226,173		Welsch et al.	05-01-2001	
		6,261,963		Zhao et al.	07-17-2001	
		6,355,555		Stephen Keetal Park	03-12-2002	
		6,441,492		James A. Cunningham	08-27-2002	
		6,566,247		Stumborg et al.	05-20-2003	

Examiner
signature

Date
considered

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on this form you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office.